<u>Remarks</u>

The above-referenced application has been reviewed in light of the Examiner's Final Office Action dated May 9, 2008. Claims 1, 14 and 27 have been amended, and new Claim 40 has been added. Therefore, Claims 1-40 are currently pending in this application. The Examiner's reconsideration of the rejections is respectfully requested, particularly in view of the above amendments and the following remarks.

In accordance with the Office Action, Claims 1, 4, 5, 7, 8, 9, 11, 12, 14, 17, 18, 20, 21, 22, 24, 25, 27, 30, 31, 33, 34, 35, 37 and 38 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Jakab et al., "A Practical Guide to the 3D Slicer". Claims 1, 14 and 27 have been amended, and new Claim 40 has been added.

Amended Claim 1 recites, *inter alia,* a "method for image segmentation . . . comprising: receiving scan data as a plurality of original two-dimensional (2D) scans disposed with a scanning vector normal thereto; selecting an arbitrary viewing vector disposed non-parallel to the scanning vector; rendering the scan data as a 3D image about the viewing vector; displaying the rendered 3D image in an octant view; selecting a range of new 2D image slices with the arbitrary viewing vector disposed normal thereto from within the octant view of the 3D image; performing 2D segmentation on the selected slices to obtain a segmented 3D object; and displaying the segmented 3D object." Support for amended Claim 1 is present in the specification as originally filed. *See, e.g.,* Application at page 1, line

21 through page 2, line 4; page 4, lines 16-18; page 6, lines 7-9; page 9, line 21 through page 10, line 5. No new matter has been added.

The Jakab et al. reference is generally directed towards segmentation using original scan slices. Unfortunately, Jakab fails to contemplate, much less address, selecting an arbitrary viewing vector disposed non-parallel to the scanning vector, and rendering the scan data as a 3D image about the viewing vector.

Amended Claims 14 and 27 recite features comparable to those of amended Claim 1. Therefore, amended Claims 1, 14 and 27 are neither taught nor suggested by Jakab et al. In addition, the Examiner's attention is drawn to new Claim 40, which recites additional patentable features.

In accordance with the Office Action, Claims 2, 3, 15, 16, 28 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jakab et al. taken in combination with Gering, "A System for Surgical Planning and Guidance using Image Fusion and Interventional MR".

The Gering paper is generally directed towards fusing 2D images into 3D space. As noted above with respect to the 102(b) rejections, Jakab et al. fail to teach or suggest selecting an arbitrary viewing vector disposed non-parallel to the scanning vector, and rendering the scan data as a 3D image about the viewing vector. Unfortunately, the Gering reference fails to cure at least the above-described deficiencies of Jakab et al.

In accordance with the Office Action, Claims 6, 19 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jakab et al. taken in

combination with U.S. Patent No. 5,264,836 to Rubin.

The Rubin patent is generally directed towards translating between 2D coordinates and 3D coordinates in an image space. As discussed above with respect to the 102(b) rejections, Jakab et al. fail to teach or suggest selecting an arbitrary viewing vector disposed non-parallel to the scanning vector, and rendering the scan data as a 3D image about the viewing vector. Unfortunately, the Rubin reference fails to cure at least the above-described deficiencies of Jakab et al.

In accordance with the Office Action, Claims 13, 26 and 38 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jakab et al. taken in combination with U.S. Patent Publication 2003/0103682A1 by Blake et al.

The Blake et al. publication is generally directed towards image object boundary detection by particle filtering. As discussed above with respect to the 102(b) rejections, Jakab et al. fail to teach or suggest selecting an arbitrary viewing vector disposed non-parallel to the scanning vector, and rendering the scan data as a 3D image about the viewing vector. Unfortunately, the Blake reference fails to cure at least the above-described deficiencies of Jakab et al.
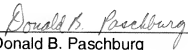
That is, none of the above-cited references teach or suggest "selecting an arbitrary viewing vector disposed non-parallel to the scanning vector; rendering the scan data as a 3D image about the viewing vector", much less the particular combination of all features recited in amended Claim 1. Therefore, amended Claims 1, 14 and 27 are neither taught nor suggested by Jakab et al., whether

taken alone or in combination with any of the other references of record in this case.

Conclusion:

Accordingly, it is respectfully submitted that independent Claims 1, 14 and 27 are in condition for allowance for at least the reasons stated above. Since the remaining dependent claims each depend from one of the above claims and necessarily include each of the elements and limitations thereof, it is respectfully submitted that these claims are also in condition for allowance for at least the reasons stated, as well as for reciting additional patentable subject matter. All issues raised by the Examiner having been addressed, reconsideration of the rejections and an early and favorable allowance of this case are earnestly solicited.

Respectfully submitted,

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